

Amendments to the Drawings:

The drawing sheet attached in connection with the above-identified application containing Figures 16 and 17 is being presented as a new formal drawing sheet to be substituted for the previously submitted drawing sheet. The drawing Figure 17 has been amended. Appended to this amendment is an annotated copy of the previous drawing sheet which has been marked to show changes presented in the replacement sheet of the drawing.

The specific changes which have been made to Figure 17 are to change "RIGHT" in steps S55 and S56 to "LEFT."

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

In the specification, paragraphs 0075, 0093, and 0105 have been amended.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

New claims 15-18 have been added. After amending the claims as set forth above, claims 1-14 are now pending in this application.

Information Disclosure Statement

Applicant thanks the Office for providing a signed and initialed copy of the SB/08 form submitted on May 26, 2004. However, Applicant notes that the Office has not provided a signed and initialed copy of the SB/08 form submitted on March 2, 2004. Applicant requests that the Office consider the references noted on the SB/08 form submitted March 2, 2004 and provide an initialed and signed copy of this SB/08 form with the next Office correspondence.

Rejections under 35 U.S.C. § 112

Claims 3, 4, and 8 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Claims 3, 4, 8 have been amended, as appropriate, to overcome these rejections. Withdrawal of these rejection is respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 1 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,894,606 (hereafter "Forbes et al."). This rejection is respectfully traversed.

Claim 1 recites a lane deviation alarm system that includes a lane defining line detecting section and “a criteria changing section that changes a criteria for determining a lane deviation tendency of the host vehicle, on the basis of a detecting condition of the lane defining line.” Claim 14 includes similar language.

Forbes et al. discloses a vehicular black box monitoring system that includes cameras 102, 104 to look down on a roadway 106 to detect lines 108, 110. See Forbes et al. at col. 3, lines 46-57. Signals from the cameras 102, 104 are input to black box 400 that includes a CPU 402. See Forbes et al. at col. 5, lines 61-67, col. 6, lines 1-9. Forbes et al. discloses that “...the system can determine the magnitude of deviation of the vehicle from the center of the lane.” See Forbes at col. 5, lines 16-19. However, Forbes et al. does not disclose “a criteria changing section that changes a criteria for determining a lane deviation tendency of the host vehicle, on the basis of a detecting condition of the lane defining line.” Although Forbes et al. discloses a system that determines a lane deviation tendency of a host vehicle, this system does not change the criteria for determining a lane deviation tendency of the host vehicle. Forbes only discloses the determination of a lane deviation tendency and is silent in regard to changing the criteria for determining such a lane deviation tendency. Nor does Forbes et al. disclose that such a criteria is changed on the basis of a detecting condition of the lane defining line.

For at least the reasons noted above, Forbes et al. fails to disclose all of the limitations recited in claims 1 and 14. Withdrawal of this rejection is respectfully requested.

Claims 12 and 13 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,748,302 (hereafter “Kawazoe”). This rejection is respectfully traversed.

Claim 12 recites a lane deviation alarm system that includes a controller arranged to detect a lane defining line, “to change a decision criteria for determining a lane deviation tendency of the host vehicle, on the basis of a detecting condition of the lane defining line,” and to generate an alarm.

Claim 13 recites a method of generating an alarm when a lane deviation tendency of a host vehicle is determined that includes the steps of detecting a lane defining line and

“changing a criteria for determining a lane deviation tendency of the host vehicle, on the basis of a detecting condition of the lane defining line.”

Kawazoe discloses a lane tracking control system for a vehicle that includes a camera 1 that takes images of a road ahead of a vehicle, an image processor 2, and a controller 3 that detects the presence of lane markers on the road and detects a lane departure condition of the vehicle. See Kawazoe at col. 3, lines 20-33. The controller 3 determines a lane departure condition by calculating a target yaw rate on the basis of detected lane marker information, determines a difference between the calculated yaw rate and a detected yaw rate, and compares the difference in yaw rates to a threshold value to determine if there is a tendency for a lane departure. See Kawazoe at col. 3, lines 64-67, col. 4, lines 1-14.

Kawazoe does not disclose a system arranged “to change a decision criteria for determining a lane deviation tendency of the host vehicle, on the basis of a detecting condition of the lane defining line,” as recited by claim 12. Nor does Kawazoe disclose the step of “changing a criteria for determining a lane deviation tendency of the host vehicle, on the basis of a detecting condition of the lane defining line,” as recited by claim 13. Kawazoe is silent in regard to changing the criteria for determining a lane deviation tendency. Kawazoe does not disclose changing the criteria determining the lane deviation tendency. Nor does Kawazoe disclose changing such criteria “on the basis of a detecting condition of the lane defining line.”

For at least the reasons noted above, Kawazoe fails to disclose all of the limitations recited by claims 12 and 13. Withdrawal of this rejection is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 8 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Forbes et al. in view of U.S. Patent No. 6,732,021 (hereafter “Matsumoto et al.”). This rejection is respectfully traversed. Matsumoto et al. fails to remedy the deficiencies of Forbes et al., as noted above. Withdrawal of this rejection is respectfully requested.

Allowable Subject Matter

Applicant wishes to thank the Office for indicating that claims 2, 5-7, 9, and 11 contain allowable subject matter.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date January 9, 2006

By 

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ANNOTATED SHEET
TO SHOW CHANGES MADE

FIG.16

RELATIONSHIP BETWEEN SIDESLIP ANGLE
AND VEHICLE SPEED AT CENTER OF GRAVITY

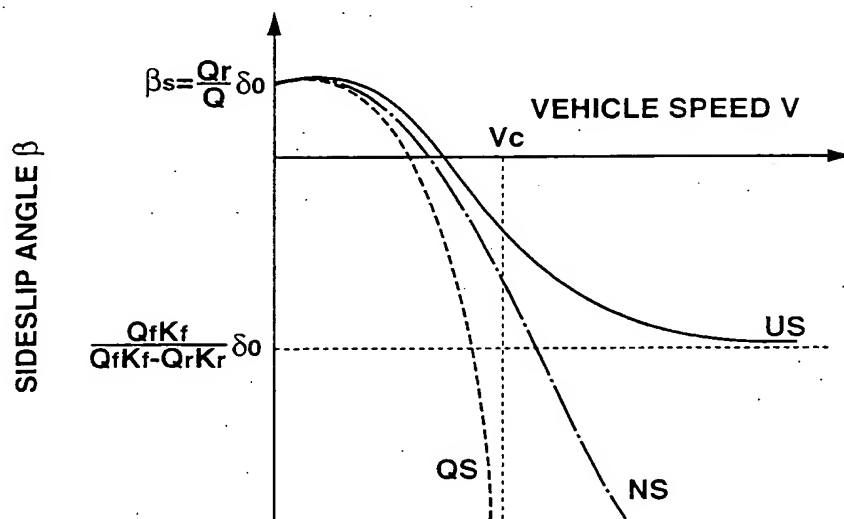


FIG.17

